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DISCLOSURE TEXT:

1p. Photosensitive material, such as photosensitive **polyimide**, can be used as an insulating layer between layers of circuitry which are deposited on a ceramic substrate. In such multilayer circuitry, connections or vias must be provided between the various layers of circuitry. It has been found that vias having **tapered** walls are superior to vias having straight walls. - Vias having **tapered** walls, such as those shown in Fig. 1B, can be obtained by exposing the photosensitive **polyimide** using a multi-density glass mask. The multi-density glass mask shown in Fig. 1A has a transparent area 10 in the center and opaque areas 11 on the outer sides. In area 12 the transmissivity varies between transparent and opaque. - When this mask is used to expose the photosensitive **polyimide** layer and the photosensitive layer is developed, the fully exposed center area is completely washed out, and the partially exposed areas are washed out in a **tapered** fashion, as shown. The mask 8 can be designed with as many different shades of greyness as necessary to give the appropriate **taper**.

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